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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,753	12/24/2003	Owen Charles Kolstad	08350.3313	8934
22852	7590	11/30/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			TRAN, BINH Q	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/743,753

Applicant(s)

KOLSTAD ET AL.

Examiner

BINH Q. TRAN

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 and 24-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 24-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This office action is in response to the amendment filed September 02, 2005.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claims 1-21, and 24-36 are rejected under 35 U.S.C. 102 (b) as being anticipated by Gillinghams'755 et al. (Gillinghams'755) (Patent Number 5,357,755).***

Regarding claims 1, 15, 17, and 24, Gillinghams'755 discloses a particulate trap (e.g. 30, 36, 38), comprising: a housing (e.g. 116, 242, 244); a plurality of filters (e.g. 254, 256) disposed

Art Unit: 3748

within the housing; wherein each of the plurality of filters includes a plurality of filter sections (e.g. 254, 256) separated from an adjacent filter section by an insulating member (e.g. 248, 250, 270); a plurality of dividers (e.g. 252, 264) fluidly isolating one or more of the plurality of filters into filter divisions; at least one inlet and at least one outlet individually associated with each filter division; and a valve assembly (e.g. 258, 272, 274, 278) configured to selectively block a flow of exhaust through each of the inlets (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claim 2, 25, Gillinghams'755 further discloses that the at least one inlet includes at least one inlet tube, and the at least one outlet includes at least one outlet tube (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claim 3, 26, Gillinghams'755 further discloses that the at least one inlet includes a plurality of inlet tubes and the at least one outlet includes a plurality of outlet tubes (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claims 4, 18, and 27, Gillinghams'755 further discloses that each filter section being separately regenerable (e.g. See Figs. 12-13; col. 13, lines 19-67; col. 11, lines 1-67; col. 15, lines 1-24).

Regarding claim 5, 28, Gillinghams'755 further discloses that each of the plurality of filter sections includes an electrically conductive wire (e.g. 334, 422, 442) mesh medium (e.g. See Figs. 12-17; col. 16, lines 55-67; col. 17, lines 1-64).

Regarding claim 6, Gillinghams'755 further discloses that each of the plurality of filter sections has a substantially corrugated shape tubes (e.g. See Figs. 1-11; col. 5, lines 5-65).

Art Unit: 3748

Regarding claims 7, 16, 19, and 29, Gillinghams'755 further discloses that the valve assembly includes a plurality of valve elements, each of the plurality of valve elements being configured to selectively block one of the at least one inlet tubes (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claims 8, 20, and 30, Gillinghams'755 further discloses a controller operable to selectively cause regeneration of at least one of the plurality of filter sections when a predetermined condition has been satisfied (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claim 9, 31, Gillinghams'755 further discloses that the predetermined condition is a lapsed period of engine operation (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claim 10, 32, Gillinghams'755 further discloses that the predetermined condition is a pressure differential measured across the filter divisions (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claim 11, 33, Gillinghams'755 further discloses that each of the plurality of filters is substantially rectangular and a flow of exhaust enters a first side of the plurality of filters and exits a second side of the plurality of filters (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claim 12, 34, Gillinghams'755 further discloses that all of the inlets receive exhaust from a common inlet chamber and all outlets flow exhaust to a common outlet chamber (e.g. See Figs. 1-27; col. 8, lines 61-67; col. 9, lines 1-67).

Art Unit: 3748

Regarding claim 13, 35, Gillinghams'755 further discloses an exhaust flow through each of the plurality of filters flows in one direction (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

Regarding claims 14, 21, and 36, Gillinghams'755 further discloses that each of the plurality of filters is independently replaceable (e.g. See Figs. 12-13; col. 12, lines 48-67; col. 13, lines 1-48).

***Claims 1-21, and 24-36 are rejected under 35 U.S.C. 102 (e) as being anticipated by Peter et al. (Peter) (Patent Number 6,572,682).***

Regarding claims 1, 15, 17, and 24, Peter discloses a particulate trap (e.g. 10), comprising: a housing (e.g. 42); a plurality of filters (e.g. 16) disposed within the housing; wherein each of the plurality of filters includes a plurality of filter sections (e.g. 60, 62) separated from an adjacent filter section by an insulating member (e.g. 68, 70); a plurality of dividers (e.g. 68) fluidly isolating one or more of the plurality of filters into filter divisions; at least one inlet and at least one outlet individually associated with each filter division; and a valve assembly (e.g. 20, 26) configured to selectively block a flow of exhaust through each of the inlets (e.g. See Figs. 1-9; col. 5, lines 60-67; col. 6, lines 1-63).

Regarding claims 2, 25, Peter further discloses that the at least one inlet includes at least one inlet tube, and the at least one outlet includes at least one outlet tube (e.g. See Figs. 1-9; col. 5, lines 60-67; col. 6, lines 1-63).

Regarding claims 3, 26, Peter further discloses that the at least one inlet includes a plurality of inlet tubes and the at least one outlet includes a plurality of outlet tubes (e.g. See Figs. 1-9; col. 5, lines 60-67; col. 6, lines 1-63).

Regarding claims 4, 18, and 27, Peter further discloses that each filter section being separately regenerable (e.g. See Figs. 1-9; col. 10, lines 1-67; col. 11, lines 1-5).

Regarding claims 5, 28, Peter further discloses that each of the plurality of filter sections includes an electrically conductive wire (e.g. 62) mesh medium (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claim 6, Peter further discloses that each of the plurality of filter sections has a substantially corrugated shape tubes (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claims 7, 16, 19, and 29, Peter further discloses that the valve assembly includes a plurality of valve elements, each of the plurality of valve elements being configured to selectively block one of the at least one inlets tubes (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claims 8, 20, and 30, Peter further discloses a controller operable to selectively cause regeneration of at least one of the plurality of filter sections when a predetermined condition has been satisfied (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claims 9, 31, Peter further discloses that the predetermined condition is a lapsed period of engine operation (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claims 10, 32, Peter further discloses that the predetermined condition is a pressure differential measured across the filter divisions (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claims 11, 33, Peter further discloses that each of the plurality of filters is substantially rectangular and a flow of exhaust enters a first side of the plurality of filters and exits a second side of the plurality of filters (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claims 12, 34, Peter further discloses that all of the inlets receive exhaust from a common inlet chamber and all outlets flow exhaust to a common outlet chamber (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claims 13, 35, Peter further discloses an exhaust flow through each of the plurality of filters flows in one direction (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).

Regarding claims 14, 21, and 36, Peter further discloses that each of the plurality of filters is independently replaceable (e.g. See Figs. 1-9; col. 7, lines 12-67; col. 8-9, lines 1-67).



***Response to Arguments***

Applicant's arguments filed September 02, 2005 have been fully considered but they are not completely persuasive. ***Claims 1-21, and 24-36 are pending.***

Applicant's cooperation in explaining the claims subject matter more specific to overcome the claim rejection is appreciated.

Applicant's arguments with respect to claims 1-21, and 24-36 have been considered but are moot in view of the new ground(s) of rejection as discussed above.

Applicant's amendment (Claims 1-21, and 24-36) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL See MPEP, 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

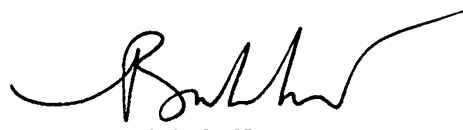
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (571) 272-4865. The examiner can normally be reached on Monday-Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (571) 272-4859. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BT  
November 24, 2005



Binh Q. Tran  
Patent Examiner  
Art Unit 3748